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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,220	11/26/2003	Shon R. Pulley	02-1061-A	8497

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EXAMINER

SOLOLA, TAOFIQ A

ART UNIT PAPER NUMBER

1626

DATE MAILED: 01/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/723,220

Applicant(s)

PULLEY ET AL.

Examiner

Taofiq A. Solola

Art Unit

1626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 27 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 2,22 and 23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1, 3-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1626

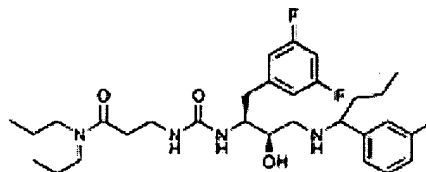
Claims 1-23 are pending in this application.

Claims 2, 22-23 are drawn to non-elected inventions.

RESTRICTION REQUIREMENT

In response to the Restriction Requirement, Applicant elects the invention of group I, claims 1, 3-21. The election is made without indication if it is with or without traverse. Therefore, it is deemed made without traverse. The restriction is still deemed proper and therefore made FINAL.

Applicant also elects the following species:



In that structure:

 R_1 is difluorobenzyl; R_2 is 3-ethylphenyl)butyl;each R_{30} is hydrogen; R_2 and R_3 are both hydrogen;and R_4 is 3-dipropylamino-3-oxopropylamino.

Therefore, claims 1, 3-21 are being examined in part subject to the election made by applicant.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 1626

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1, 3-18, 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phraseology "groups which are independently selected from halogen", lines 2-3, page 178 and "(IV) $-(CR_{C-x}R_{C-y})_{0-4}$ -heteroaryl," lines 6-7, page 181, claim 1, are confusing. As written, it is not clear what applicant is claiming. Therefore, claims 1, 3-18, 20 are indefinite.

The terms " R_{1-aryl} " and " $R_{1-heteroaryl}$ ", lines, 20, 22, page 180, claim 1, are not defined in claim 1. Therefore, claims 1, 3-18, 20 are indefinite. The substituents in claim 12, lines 10-15 as written are confusing and therefore the claim is indefinite. The same is true of claim 17. Appropriate corrections are required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 1626

Claims 1, 3-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Fobian et al., WO 2004022523 (priority date 9/6/02).

Fobian et al., disclose compounds in the attached abstract.

Claims 1, 3-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Birkus et al., WO 2003090691 (priority date 4/26/02).

Birkus et al., disclose compounds in the attached abstract.

Claims 1, 3-21 are rejected under 35 U.S.C. 102(a) as being anticipated by Varghese et al., WO 2003040096.

Varghese et al., disclose compounds in the attached abstract.

Claims 1, 3-21 are rejected under 35 U.S.C. 102(a) as being anticipated by Wolfe et al., WO 2002014264.

Wolfe et al., disclose the checked compounds in the attached abstract.

Claims 1, 3-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Hale et al., WO 2000047551.

Hale et al., disclose compounds in the attached abstract.

Claims 1, 3-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Kamijo et al., JP 09124629.

Kamijo et al., disclose compounds in the attached abstract.

Claims 1, 3-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Tung et al., WO 9633187.

Tung et al., disclose compounds in the attached abstract.

Claims 1, 3-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Vazquez et al., US 5,578,606.

Vazquez et al., disclose compounds in the attached abstract.

Art Unit: 1626

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vazquez et al., J. Med. Chem. (1995), Vol. 38(4), pages 581-584, and all prior arts cited above, individually.

Applicant claims compounds of claims 1, 3-21.

Determination of the scope and content of the prior art (MPEP §2141.01)

Each prior art teaches the compounds cited above and methods of using the compounds. See the citations. Vazquez et al., teach compounds 4-14 in Table 1.

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

The difference between the instant invention and that of the prior arts is that Applicant claims H instead of alkyl and vice versa in some of the species embraced by the generic formulae. In other species Applicant claims compounds wherein the length of a carbon chain is either longer or shorter than that of the prior arts.

Finding of prima facie obviousness---rational and motivation (MPEP §2142.2413)

However, H and alkyl are art recognized equivalents. *In re Lincoln*, 126 USPQ 477, 53 USPQ 40 (CCPA, 1942); *In re Druey*, 319 F.2d 237, 138 USPQ 39 (CCPA, 1963); *In re Lohr*, 317 F.2d 388, 137 USPQ 548 (CCPA, 1963); *In re Hoehsema*, 399 F.2d 269, 158 USPQ 598 (CCPA, 1968); *In re Wood*, 582 F.2d 638, 199 USPQ 137 (CCPA, 1978); *In re Hoke*, 560 F.2d

Art Unit: 1626

436, 195 USPQ 148 (CCPA, 1977); *Ex parte Fauque*, 121 USPQ 425 (POBA, 1954); *Ex parte Henkel*, 130 USPQ 474, (POBA, 1960).

When the difference between compounds is the length of a carbon chain such are adjacent homologs. However, adjacent homologs are prima facie obvious. *In re Henze*, 85 USPQ 261 (1950). For the compounds of the prior art to be used for the stated utilities they must be used in form of compositions. Therefore, the instant invention is prima facie obvious from the teaching of the prior arts. One of ordinary skill in the art would have known to claim the compounds and their compositions at the time the invention was made. The motivation is from the teachings of prior arts that the compounds have utilities, from knowing that H and alkyl are equivalents and that adjacent homologs would have similar physical and biochemical properties.

Telephone Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taofiq A. Solola, PhD. JD., whose telephone number is (571) 272-0709.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Joseph McKane, can be reached on (571) 272-0699. The fax phone number for this Group is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1600.

Art Unit: 1626



TAOFIQ SOLOLA
PRIMARY EXAMINER

Group 1626

December 15, 2005.